Appl. No.: 09/943,252
Amdt. Dated: March 16, 2004
Reply to Office Action of: January 7, 2004

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims: (additions underlines, deletions stuck through)

1. (currently amended) A method for manufacturing an EUV lithography element, comprising:

sagging a plate of a glass material to produce a blank; and

polishing a top face of the blank to produce a finished lithography element;

wherein striae planes in the sagged plate of glass material remain substantially parallel to the sagged, curved surface of the lithography element.

2 (original) The method of claim 1, wherein the glass material is made by flame hydrolysis.

3. (original) The method of claim 1, wherein the glass material comprises an ultra low expansion glass material.

4. (currently amended) The method of claim 3, wherein the ultra low expansion glass material has a coefficient of thermal expansion of ~~no more than about~~ 0 ± 30 parts per billion per degree Celsius in a temperature range of 5 to 35 degrees Celsius.

5. (currently amended) A method for manufacturing a EUV lithography element, comprising:

grinding a top face of a piece of a glass material;

sagging a plate of the glass material over the top face of the piece to produce a blank; and

polishing a top face of the blank to produce a finished lithography element;

wherein striae planes in the sagged plate of glass material remain substantially parallel to the sagged, curved surface of the lithography element.

6. (original) The method of claim 5, wherein the glass material is made by flame hydrolysis.

7. (original) The method of claim 5, wherein the glass material comprises an ultra low expansion glass material.

8. (currently amended) The method of claim 5, wherein the ultra low expansion glass material has a coefficient of thermal expansion of ~~no more than about~~ 0 ± 30 parts per billion per degree ~~Celcius~~ Celsius in a temperature range of 5 to 35 degrees ~~Celcius~~ Celsius.

9. (currently amended) A method for manufacturing a mirror, comprising:

sagging a plate of a glass material to produce a mirror blank; and

polishing a top face of the mirror blank to produce a finished mirror;

wherein striae planes in the sagged plate of glass material remain substantially parallel to the sagged, curved surface of the mirror.

10. (original) The method of claim 9, wherein the glass material is made by flame hydrolysis.

11. (original) The method of claim 9, wherein the glass material comprises an ultra low expansion glass material.

12. (currently amended) The method of claim 11, wherein the ultra low expansion glass material has a coefficient of thermal expansion of ~~no more than about~~ 0 ± 30 parts per billion per degree Celsius in a temperature range of 5 to 35 degrees Celsius.

13. (currently amended) A method for manufacturing a mirror, comprising:

grinding a top face of a piece of a glass material;

sagging a plate of the glass material over the top face of the piece to produce a mirror blank; and

polishing a top face of the mirror blank to produce a finished mirror;

wherein striae planes in the sagged plate of glass material remain substantially parallel to the sagged, curved surface of the lithography element.

14. (original) The method of claim 13, wherein the glass material is made by flame hydrolysis.

15. (original) The method of claim 13, wherein the glass material comprises an ultra low expansion glass material.

16. (currently amended) The method of claim 13, wherein the ultra low expansion glass material has a coefficient of thermal expansion of ~~no more than about~~ 0 ± 30 parts per billion per degree ~~Celcius~~ Celsius in a temperature range of 5 to 35 degrees ~~Celcius~~ Celsius.